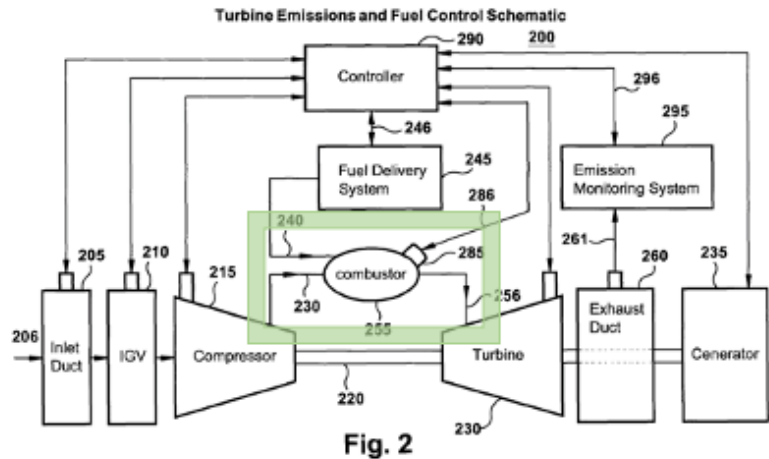
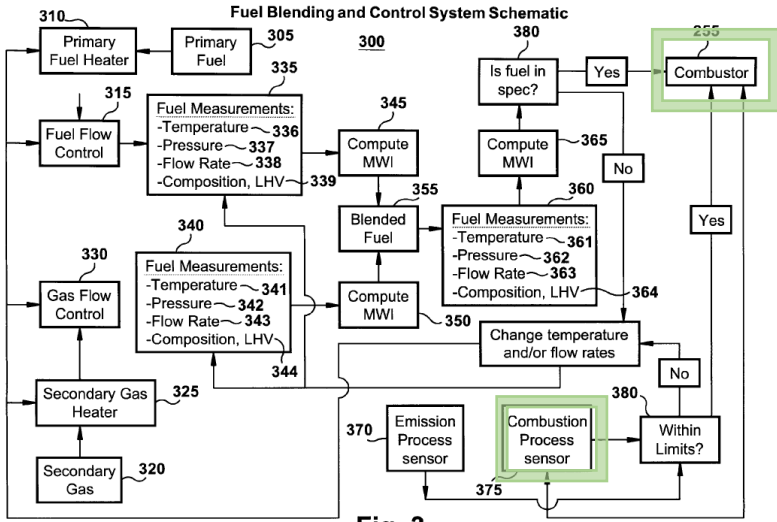


EXHIBIT L

U.S. Patent No. 7,770,396 (“the ’396 Patent”)**Accused System:**

Defendants’ system that enables mixing up to 25% ethane with natural gas for combustion in a natural gas turbine infringes at least claims 1 and 10 of the ’396 Patent. On information and belief, the features and functionalities described in U.S. Patent No. 7,895,821 (“the ’821 Patent”) have been implemented in the Accused System. Accordingly, citations to the ’821 Patent below reflect features and functionalities in the Accused System.

Claim 1	Accused System
<p>1[pre]. A method for operating a combustion device, the method comprising the steps of:</p>	<p>To the extent the preamble is limiting, the Accused System is used to perform a method for operating a combustion device, for example, as described by the ’821 Patent excerpts below:</p> <p>“The present invention relates to a flexible and automatic system and method for blending an inexpensive secondary gas with a primary gas fuel for operation of a Dry Low NO_x (DLN) gas turbine.” ’821 Patent at 2:50-53.</p>  <p>The diagram, labeled Fig. 2, is titled "Turbine Emissions and Fuel Control Schematic". It illustrates a gas turbine system. Air enters through an Inlet Duct (206) and passes through an Inlet Guide Vanes (IGV) (205) into a Compressor (210). The compressed air (215) enters the combustor (230). Fuel is supplied to the combustor (230) from a Fuel Delivery System (245) via a fuel line (246). The combustor (230) is also connected to a Controller (290) via a control line (246). The combustor (230) is highlighted with a green box. The combustion products (255) expand through a Turbine (230) and an Exhaust Duct (260) to a Generator (235). An Emission Monitoring System (295) is connected to the Exhaust Duct (260) via a sensor (261) and a control line (296). The system is also connected to a Fuel Delivery System (245) via a control line (296). The diagram includes various numbered components: 206, 205, 210, 215, 230, 245, 246, 255, 260, 261, 290, 295, 296, and 235.</p>

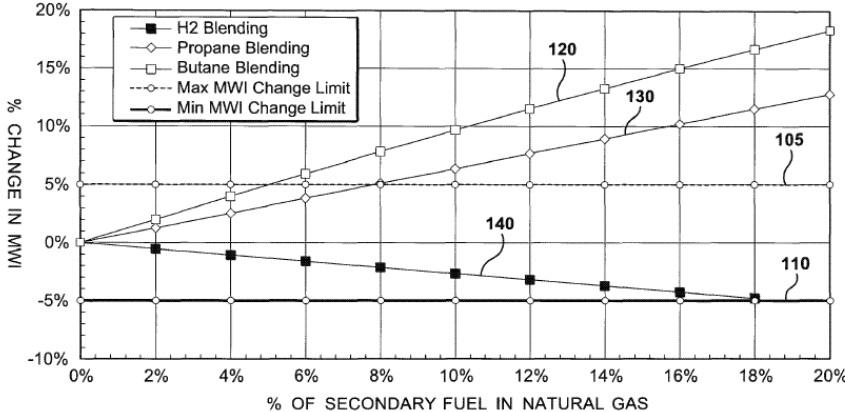
Claim 1	Accused System
	 <p>Fuel Blending and Control System Schematic</p> <p>The schematic illustrates a fuel blending and control system. Primary fuel (305) is heated by a Primary Fuel Heater (310) and then passes through a Fuel Flow Control (315) to a Fuel Measurements block (336). Secondary gas (320) is heated by a Secondary Gas Heater (325) and then passes through a Gas Flow Control (330) to another Fuel Measurements block (341). The outputs of these measurement blocks are fed into a Compute MWI block (339). The outputs of the Compute MWI block (339) and the Fuel Measurements block (341) are fed into a Blended Fuel block (355). The Blended Fuel block (355) is then fed into a Fuel Measurements block (361). The output of the Fuel Measurements block (361) is fed into a Compute MWI block (365). The output of the Compute MWI block (365) is fed into a decision block (380) labeled "Is fuel in spec?". If the answer is "Yes", the fuel is sent to a Combustor (255). If the answer is "No", the fuel is sent to a Change temperature and/or flow rates block (364). The output of the Change temperature and/or flow rates block (364) is fed into a decision block (386) labeled "Within Limits?". If the answer is "Yes", the fuel is sent to the Combustor (255). If the answer is "No", the fuel is sent back to the Fuel Measurements block (361). The Combustor (255) is also monitored by an Emission Process sensor (370) and a Combustion Process sensor (375). The output of the Combustion Process sensor (375) is fed into the "Within Limits?" decision block (386).</p> <p>Fig. 3</p> <p>“According to a first aspect, a DLN combustion gas turbine is provided, which allows operation with a fuel blend of a primary gas fuel and a secondary gas.” <i>Id.</i> at 2:53-55.</p> <p>“According to a second aspect of the present invention, a method for operating a DLN combustion gas turbine with a fuel blend of a primary gas fuel and a secondary gas is provided for combustors with a single downstream combustion zone...” <i>Id.</i> at 3:8-11.</p> <p>“Key elements of this invention consist of integrating an existing combustion gas turbine controller with an alternate gas injection module...” <i>Id.</i> at 3:58-61.</p> <p>“The method includes supplying a primary gas fuel from a primary gas fuel supply and supplying a secondary gas from a secondary gas supply and operating at least one combustor for a combustion gas turbine with a fuel blend within a predetermined range of the primary gas fuel and the secondary gas. The method also includes monitoring a quality of the fuel blend and monitoring combustion noise during operation with the fuel blend. The method controls a fuel blend of a primary gas fuel from the primary gas fuel supply and a secondary gas from the</p>

Claim 1	Accused System
	<p>secondary gas supply system according to a permissible range in a quality of the fuel blend and an avoidance of combustion dynamics.” <i>Id.</i> at 3:17-28.</p> <p>“The following embodiments of the present invention have many advantages, including providing a method and system for blending a desired amount of alternate gas into a primary natural gas fuel for a DLN combustion turbine.” <i>Id.</i> at 3:49-52.</p>
<p>[1(a)] producing a fuel gas using a liquid fuel comprising hydrocarbon molecules and a diluent gas;</p>	<p>The Accused System is used to produce a fuel gas using a liquid fuel comprising hydrocarbon molecules and a diluent gas, for example, as described by the ’821 Patent excerpts below:</p> <p>“FIG. 1 provides a graph illustrating an impact of injection of alternate fuels (such as hydrogen, propane, butane, etc.) on the MWI of natural gas fuel” <i>Id.</i> at 3:37-39.</p> <p>“...a method and system for blending a desired amount of alternate gas into a primary natural gas fuel...the alternate gas may be an alternate gas fuel (such as hydrogen, ethane, butane, propane, LNG, etc.)...” <i>Id.</i> at 3: 50-54.</p> <p>“A solution allowing 5% hydrogen...” <i>Id.</i> at 4:13.</p> <p>“FIG. 1 illustrates an impact of injection of secondary gas fuels (such as hydrogen, propane, butane, etc.) on MWI of a fuel blend with a primary natural gas fuel.” <i>Id.</i> at 4:29-31.</p> <p>Further, as explained in a recent press release, the Accused System produces the claimed fuel gas by vaporizing liquid ethane into natural gas—the claimed diluent gas:</p> <p>"Competitive Power Ventures says its recently-completed CPV Fairview natural gas-fired, combined-cycle plant in Pennsylvania is the first generation station of its size to be able to switch to burn high contents of ethane blended into natural gas, an innovation intended to cut fuel costs, CPV announced Tuesday...A GE vaporizer "the size of a delivery truck" can turn liquid ethane from the pipeline into a gas that can be blended into natural gas to make a fuel mixture up to 25% ethane, Ahrens said....This ethane capability, provided by GE’s DLN 2.6+ combustion system, makes Fairview "the first plant of its kind," CPV CEO Gary Lambert said in</p>

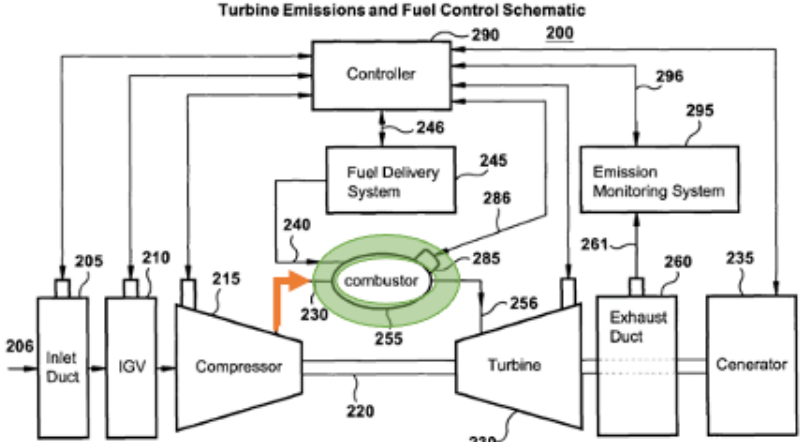
Claim 1	Accused System
	<p>a statement. According to GE, the DLN 2.6+ system is intended to improve operational flexibility and lead to faster dispatch times for gas turbine plants, an important attribute as "demand for renewable resources" drives an "increased needs for cyclic operation."</p> <p>https://www.utilitydive.com/news/competitive-power-ventures-gas-plant-uses-new-ge-combustion-system-to-cut-f/574712/</p>
<p>[1(b)] premixing the fuel gas with a second gas containing oxygen to produce a gas mixture in a premixing zone located upstream of a combustion zone of a combustion device,</p>	<p>The Accused System is used to premix the fuel gas with a second gas containing oxygen to produce a gas mixture in a premixing zone located upstream of a combustion zone of a combustion device, for example, as described by the '821 Patent excerpts below:</p> <p>"The primary nozzles and the center fuel nozzle premix a fuel blend with air for the combustor." '821 Patent at 2:61-63.</p> <p>Claim 1 & 17 – "wherein the primary nozzles and the center fuel nozzle premix a fuel blend with air for the combustor." <i>Id.</i> at 7:65-66, 9:26-28.</p> <p>"The primary nozzles and the center fuel nozzle premix a fuel blend with air for the combustor." <i>Id.</i> at 2:61-63.</p> <p>"blending secondary gases or gas fuels with a <u>primary gas fuel in a DLN gas turbine combustor premixing the fuel blend</u> in all combustor nozzles and combusting within a single downstream combustion zone." <i>Id.</i> at 2:28-32.</p> <p>"A plurality of combustors each includes a single <u>downstream combustion zone</u> supplied by a center fuel nozzle..." <i>Id.</i> at 2:57-59.</p> <p>"Gas turbines equipped with low Nitrous oxide (NOx) emission combustion systems typically employ a process known as lean, pre-mixed combustion where fuel and combustion air are mixed upstream of the <u>combustion zone</u> to control and limit thermal NOx production." <i>Id.</i> at 1:32-36.</p>

Claim 1	Accused System
<p>[1(c)] the combustion device being configured such that autoignition of the gas mixture would occur upstream of the combustion zone in the absence of the diluent gas; and</p>	<p>The Accused System includes a combustion device being configured such that autoignition of the gas mixture would occur upstream of the combustion zone in the absence of the diluent gas, for example, as described by the '821 Patent excerpts below:</p> <p>“Such combustion systems [DLN combustion systems] often function well over a relatively narrow range of fuel injector pressure ratios and fuel compositions. If gas turbine combustion systems are operated outside of that range, combustion dynamics levels (noise pressure Waves due to oscillatory combustion process) can get large enough to cause significant distress to combustion parts, thereby shortening the maintenance intervals or even cause irreparable hardware damage and forced outages.” <i>Id.</i> at 1:36-44.</p> <p>“The method controls a fuel blend of a primary gas fuel from the primary gas fuel supply and a secondary gas from the secondary gas supply system according to a permissible range in a quality of the fuel blend and an avoidance of combustion dynamics.” <i>Id.</i> at 3:24-28.</p> <p>“The determined LHV of incoming gas fuel can in-turn be used to determine instantaneous MWI and automatically modulate primary gas fuel and secondary gas fuel mixture ratio...a much wider range of fuel composition and resulting MWI level can be employed without significant changes in combustion dynamics levels and minimal changes in NOx emissions.” <i>Id.</i> at 4:53-61.</p> <p>“...fuel specifications do not typically allow any amount of hydrogen to be present in the fuel gas...due to the increase risk introduced by the hydrogen.” <i>Id.</i> at 1:66-2:2.</p>
<p>[1(d)] combusting the gas mixture in the combustion zone of the combustion device;</p>	<p>The Accused System is used to combust the gas mixture in the combustion zone of the combustion device, for example, as described by the '821 Patent excerpts below:</p> <p>“Gas turbines equipped with low Nitrous oxide (NOx) emission combustion systems typically employ a process known as lean, pre-mixed combustion where fuel and combustion air are mixed upstream of the <u>combustion zone</u> to control and limit thermal NOx production.” <i>Id.</i> at 1:32-36.</p>

Claim 1	Accused System
	<p>“blending secondary gases or gas fuels with a primary gas fuel in a DLN gas turbine combustor premixing the fuel blend in all combustor nozzles and <u>combusting within a single downstream combustion zone.</u>” <i>Id.</i> at 2:28-32.</p>
<p>[1(e)] wherein the diluent gas is inert and present in an amount such that reaction of the fuel gas upstream of the combustion zone is suppressed.</p>	<p>The Accused System performs the claimed method wherein the diluent gas is inert and present in an amount such that reaction of the fuel gas upstream of the combustion zone is suppressed, for example, as described by the '821 Patent excerpts below:</p> <p>“A permissible variation in MWI of +/- 5% is generally accepted in gas turbine industry for combustion fuel nozzles. FIG. 1 shows the percent change in MWI of the fuel blend (With the gases at 300 degrees F.) versus the percent of specific secondary gas fuels in the fuel blend with natural gas. The +5% Wobbe 105 boundary is crossed for a butane gas fuel blend 120 at about 5% butane gas. The +5% Wobbe 105 boundary is crossed for a propane gas fuel blend 130 at about 8% propane gas fuel blend. The —5% Wobbe 110 boundary is crossed for a hydrogen gas fuel blend 140 at about 18% hydrogen gas. Although the figure shows that blending of relatively large percentages of some secondary fuels will change the MWI by less than 5%, there are other practical operating constraints that will prevent large quantities of secondary fuels from being mixed.” <i>Id.</i> at 4:34-48.</p>

Claim 1	Accused System
	<p data-bbox="884 282 1398 324">IMPACT OF FUEL BLENDING ON MODIFIED WOBBE INDEX (MWI DETERMINED AT 300F)</p>  <p data-bbox="1100 748 1178 776">Fig. 1</p> <p data-bbox="655 846 1892 987">“The determined LHV of incoming gas fuel can in-turn be used to determine instantaneous MWI and automatically modulate primary gas fuel and secondary gas fuel mixture ratio...a much wider range of fuel composition and resulting MWI level can be employed without significant changes in combustion dynamics levels and minimal changes in NOx emissions.” <i>Id.</i> at 4:53-61.</p> <p data-bbox="655 1065 1850 1133">“...fuel specifications do not typically allow any amount of hydrogen to be present in the fuel gas...due to the increase risk introduced by the hydrogen.” <i>Id.</i> at 1:66-2:2.</p>
Claim 10	Accused System
10[pre]. A combustion apparatus comprising: a combustor,	<i>See</i> Claim 1[pre], <i>supra</i> .
the combustor having a first inlet for accepting fuel gas,	The Accused System includes the combustor having a first inlet for accepting fuel gas, for example, as described by the '821 Patent excerpts below:

Claim 10	Accused System
	<p>“Fig. 2 illustrates a basic schematic...Fuel 240 from a fuel delivery system 245...is supplied to a plurality of combustors.” <i>Id.</i> at 5:7-17.</p> <p style="text-align: center;">Fig. 2</p>
<p>[10(a)] a second inlet for accepting oxygenated gas for supporting combustion of the fuel gas,</p>	<p>The Accused System includes a combustor having a second inlet for accepting oxygenated gas for supporting combustion of the fuel gas, for example, as described by the '821 Patent excerpts below:</p> <p>“An inlet duct 205 receives external air 206 and supplies the air to an inlet guide vane 210. The inlet guide vane 210 controls the flow of air to a compressor 215...compressed air 250 from the compressor 215 is supplied to a plurality of combustors.” <i>Id.</i> at 5:9-18; Figure 2.</p>

Claim 10	Accused System
	 <p>The diagram, labeled 'Fig. 2', is titled 'Turbine Emissions and Fuel Control Schematic'. It illustrates a gas turbine system. Air enters through an 'Inlet Duct' (206) and passes through an 'IGVT' (205) and a 'Compressor' (210). The compressed air (215) enters a 'combustor' (230), which is highlighted with a green oval. Fuel is supplied to the combustor from a 'Fuel Delivery System' (245) via a line (240). The combustor is connected to a 'Turbine' (255) via a shaft (220). The turbine is connected to an 'Exhaust Duct' (260) and a 'Generator' (235). An 'Emission Monitoring System' (295) is connected to the exhaust duct via a line (261). A 'Controller' (290) is connected to the inlet duct (206), IGVT (205), compressor (210), fuel delivery system (245), turbine (255), and emission monitoring system (295). The combustor is also connected to the controller via a line (285) and to the fuel delivery system via a line (286). The exhaust duct is connected to the controller via a line (296). The generator is connected to the controller via a line (235). The diagram is labeled 'Fig. 2' at the bottom center.</p>
[10(b)] a combustion zone,	<p>The Accused System includes a combustor having a combustion zone, for example, as described by the '821 Patent excerpts below:</p> <p>“A plurality of combustors each includes a single <u>downstream combustion zone</u> supplied by a center fuel nozzle...” <i>Id.</i> at 2:57-59.</p> <p>“Gas turbines equipped with low Nitrous oxide (NO_x) emission combustion systems typically employ a process known as lean, pre-mixed combustion where fuel and combustion air are mixed upstream of the <u>combustion zone</u> to control and limit thermal NO_x production.” <i>Id.</i> at 1:32-36.</p> <p>Claim 1 – “...comprising a single downstream <u>combustion zone</u>...” <i>Id.</i> at 7:62.</p> <p>Claim 17 – “...in a single <u>combustion zone</u> supplied by a center fuel nozzle...” <i>Id.</i> at 9:23.</p>

Claim 10	Accused System
<p>[10(c)] and a premixing zone upstream of the combustion zone, the combustion device being configured to premix the fuel gas with at least some of the oxygenated gas in the premixing zone to produce a gas mixture, and to combust the gas mixture in the combustion zone;</p>	<p>The Accused System includes a combustor having a premixing zone upstream of the combustion zone, the combustion device being configured to premix the fuel gas with at least some of the oxygenated gas in the premixing zone to produce a gas mixture, and to combust the gas mixture in the combustion zone, for example, as described by the '821 Patent excerpts below:</p> <p>“The primary nozzles and the center fuel nozzle premix a fuel blend with air for the combustor.” <i>Id.</i> at 2:61-63.</p> <p>Claim 1 & 17 – “wherein the primary nozzles and the center fuel nozzle premix a fuel blend with air for the combustor.” <i>Id.</i> at 7:65-66, 9:26-28.</p> <p>“The primary nozzles and the center fuel nozzle premix a fuel blend with air for the combustor.” <i>Id.</i> at 2:61-63.</p> <p>“blending secondary gases or gas fuels with a <u>primary gas fuel in a DLN gas turbine combustor premixing the fuel blend</u> in all combustor nozzles and combusting within a single downstream combustion zone.” <i>Id.</i> at 2:28-32.</p> <p>“Gas turbines equipped with low Nitrous oxide (NO_x) emission combustion systems typically employ a process known as lean, pre-mixed combustion where fuel and combustion air are mixed upstream of the <u>combustion zone</u> to control and limit thermal NO_x production.” <i>Id.</i> at 1:32-36.</p> <p>“blending secondary gases or gas fuels with a primary gas fuel in a DLN gas turbine combustor premixing the fuel blend in all combustor nozzles and <u>combusting within a single downstream combustion zone</u>.” <i>Id.</i> at 2:28-32.</p>
<p>[10(e)] and a fuel vaporization unit in fluid communication with the first inlet of the combustor, the fuel vaporization unit</p>	<p>The Accused System includes a fuel vaporization unit in fluid communication with the first inlet of the combustor, the fuel vaporization unit being configured to produce fuel gas using a liquid fuel comprising hydrocarbon molecules and a diluent gas, for example, as described by the '821 Patent excerpts below:</p>

Claim 10	Accused System
<p>being configured to produce fuel gas using a liquid fuel comprising hydrocarbon molecules and a diluent gas;</p>	<p>“FIG. 1 provides a graph illustrating an impact of injection of alternate fuels (such as hydrogen, propane, butane, etc.) on the MWI of natural gas fuel” <i>Id.</i> at 3:37-39.</p> <p>“...a method and system for blending a desired amount of alternate gas into a primary natural gas fuel...the alternate gas may be an alternate gas fuel (such as hydrogen, ethane, butane, propane, LNG, etc.)...” <i>Id.</i> at 3: 50-54.</p> <p>“A solution allowing 5% hydrogen...” <i>Id.</i> at 4:13.</p> <p>“FIG. 1 illustrates an impact of injection of secondary gas fuels (such as hydrogen, propane, butane, etc.) on MWI of a fuel blend with a primary natural gas fuel.” <i>Id.</i> at 4:29-31.</p> <p>Further, as explained in a recent press release, the Accused System produces the claimed fuel gas by vaporizing liquid ethane into natural gas—the claimed diluent gas:</p> <p>"Competitive Power Ventures says its recently-completed CPV Fairview natural gas-fired, combined-cycle plant in Pennsylvania is the first generation station of its size to be able to switch to burn high contents of ethane blended into natural gas, an innovation intended to cut fuel costs, CPV announced Tuesday...A GE vaporizer "the size of a delivery truck" can turn liquid ethane from the pipeline into a gas that can be blended into natural gas to make a fuel mixture up to 25% ethane, Ahrens said....This ethane capability, provided by GE's DLN 2.6+ combustion system, makes Fairview "the first plant of its kind," CPV CEO Gary Lambert said in a statement. According to GE, the DLN 2.6+ system is intended to improve operational flexibility and lead to faster dispatch times for gas turbine plants, an important attribute as "demand for renewable resources" drives an "increased needs for cyclic operation."</p> <p>https://www.utilitydive.com/news/competitive-power-ventures-gas-plant-uses-new-ge-combustion-system-to-cut-f/574712/</p>
<p>[10(f)] wherein the combustion apparatus is configured such that autoignition of the gas mixture would occur upstream of the</p>	<p><i>See</i> Claim [1(d)-(e)], <i>supra</i>.</p>

Claim 10	Accused System
combustion zone in the absence of the diluent gas and wherein the diluent gas is inert and present in the fuel gas in an amount such that reaction of the fuel gas upstream of the combustion zone is suppressed.	